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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/056,375	01/24/2002	Alan D. Kalvin	YOR920010093US2	3903

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EXAMINER	
CHEN, PO WEI	

ART UNIT	PAPER NUMBER
2676	

DATE MAILED: 02/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/056,375	KALVIN ET AL.	
	Examiner	Art Unit	
	Po-Wei (Dennis) Chen	2676	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 December 2003*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-36* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-36* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

In response to an Amendment received on December 03, 2003. This action is final.

Claims 1-36 are pending in this application. Claims 1 and 8-10 are independent claims.

The present title of the invention is "System and Method for Visual Analysis and Evaluation of Color Scales on Multiple Computer Output Devices".

The Group Art Unit of the Examiner case is now 2676. Please use the proper Art Unit number to help us serve you better.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-2, 5-16, 19-25, 28-33 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Naoi (US 6,351,263) in view of Kumada (US 6,549,654).

3. Regarding claim 1, Naoi discloses an image processor designates processing parameters for data comprising:

A system for evaluating one or more color scales (lines 5-29 of column 8);

An input interface that receives one or more of a collection of candidate color scales (lines 6-19 of column 3 and lines 14-20 of column 5 and Fig. 2; while claim recites a collection of candidate color scales, the term is broad enough to include the different densities of colors received as input depending on the adjustment mode selected);

One or more test patterns (lines 6-19 of column 3 and Fig. 13; it is noted that different test prints are generated depending on color adjustment);

An evaluation process that applies the candidate color scales to the test pattern to determine which of the candidate color scales can be used to create color-coded images on the color output device without violating the condition of perceptual ordering by more than a tolerance (lines 5-29 of column 8; the different densities of colors corresponds to candidate color scales);

Naoi does not disclose one or more color output devices. Kumada discloses an image processing utilized the method (lines 3-7 of abstract). It would have been obvious to one of ordinary skill in the art to utilize the teaching of Kumada to provide the user an easier way to select an optimum color printer and simulate the output results when a plurality of color printers are available. Also, both Naoi and Kumada are directed to utilizing different color profiles to produce testing image to provide the best output.

4. Regarding claim 2, it is noted that Naoi does not disclose the evaluation process warns the user when a color scale can not be used to create color-coded images on the color output device without violating the condition of perceptual ordering by more than a tolerance. Kumada discloses an image processing utilized the method (lines 52-63 of column 8). It would have been obvious to one of ordinary skill in the art to utilize the teaching of Kumada to provide the user an easier way to select an optimum color printer and simulate the output results when a plurality of color printers are available. Also, both Naoi and Kumada are directed to utilizing different color profiles to produce testing image to provide the best output.

5. Regarding claims 5 and 6, while claim recites one or more color reproduction characteristics of the color output device are unknown and an ambient illumination environment of the color output device is unknown. It is clear that the system disclosed by Naoi is directed to a system where the printing, or output is being evaluated (lines 4-29 of column 8) by an user because the lack of knowing the characteristics such as illumination information of the output device with the color adjustment used.

6. Regarding claim 7, while claim recites quality of the user's color vision is unknown. It is noted that the system disclosed by Naoi is directed to a system where the printing, or output is being evaluated (lines 4-29 of column 8) by an user where the system does not disclose inputting information about the user. And the evaluation process is based on user's own judgement. Thus, it is clear that the user's color vision is unknown.

7. Regarding claim 8, statements presented above, with respect to claim 1 are incorporated herein.

8. Regarding claim 9, statements presented above, with respect to claim 1 are incorporated herein.

9. Regarding claim 10, statements presented above, with respect to claim 1 are incorporated herein.

10. Regarding claim 11, Naoi discloses an image processor designates processing parameters for data comprising:

The collection of candidate color scales are representative of a variety of different viewing setups (lines 6-19 of column 3 and lines 1-34 of column 4; it is noted that by having different densities of colors, the setups of test pattern (viewing setup) in Fig. 8 will be different).

11. Regarding claim 12, while Naoi does not disclose the one or more test patterns is representative of a human face. However, it would have been obvious matter of design choice to modify Naoi by having the test pattern to be representative of a human face, since applicant has not disclosed that having the test pattern to be a representative of a human face solves any stated problem and is appear that the test pattern would perform equally well with any image object.

12. Regarding claim 13, Naoi discloses an image processor designates processing parameters for data comprising:

A display for displaying to a user of the system the test image with a series of the candidate color scales applied to the test image to form successive rating images (lines 1-31 of column 4 and lines 33-38 of column 7 and Fig. 8 and 16; noted that different color scales are applied to the test image, and image and character are successive images. Also, it is noted that a series of color scales can be considered having just one color scale);

Means for receiving from the user a rating for each of the successive rating images (lines 1-5 of column 10; by evaluating if further color change is needed correspond to rating).

13. Regarding claim 14, Naoi discloses an image processor designates processing parameters for data comprising:

Rating is representative of how well the user perceives each of the successive test images as not violating the condition of perceptual ordering (lines 1-5 of column 10; evaluation of if further color change is needed correspond to not violating the condition of perceptual ordering).

14. Regarding claim 15, Naoi discloses an image processor designates processing parameters for data comprising:

Sorting the ratings into a plurality of classes (lines 1-5 of column 10; the term a plurality of classes is broad enough to include the two classes disclose by Naoi: one needs further color change and one does not).

15. Regarding claim 16, Naoi discloses an image processor designates processing parameters for data comprising:

Determining how many of said rating images are assigned to each of said classes (lines 1-5; by evaluating the test image to determine which class the image belongs (one needs further color change and one does not) and depending on which class it is in, the number for each class is also determined. For example, if the test image needs further color change, then the class of needs further color change has 1 and class of does not need color change has 0).

16. Regarding claim 19, statements presented above, with respect to claim 1 are incorporated herein.

17. Regarding claims 20-21 and 28-29, statements presented above, with respect to claims 11-12 are incorporated herein.

18. Regarding claim 36, statements presented above, with respect to claim 1 are incorporated herein.

19. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Naoi (US 6,351,263) and Kumada (US 6,549,654) as applied to claim 1 above and further in view of Dermer et al. (US 5,313,570; refer to as Dermer herein).

20. Regarding claim 3, Naoi discloses an image processor designates processing parameters for data comprising:

Evaluate the colors scales as determined by a perceptual ordering of the test pattern by the user where the respective color scale is used to render the test pattern to the user (lines 5-29 of column 8). The combination of Naoi and Kumada does not disclose a rating process. Dermer discloses a method for determining color boundaries utilize the method (lines 57-68 of column 23 and lines 1-46 of column 24). It would have been obvious to one of ordinary skill in the art to utilize the teaching of Dermer to provide the advantage of reducing the proessing time of generating color trapping regions. Also, Naoi, Kumada and Dermer are directed to method of defining colors to optimize the output result.

21. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Naoi (US 6,351,263) and Kumada (US 6,549,654) as applied to claim 1 above and further in view of Marks (US 5,966,131).

22. Regarding claim 4, Naoi discloses an image processor designates processing parameters for data comprising:

The color output device includes a user computer interface (element 21 of Fig. 1),

A graphical user interface (Fig. 8),

An electronic color display (Fig. 8),

A color printer (lines 8-9 of abstract),

Naoi does not disclose a television monitor. Kumada discloses an image processing utilized the device (element 111 of Fig. 22 and lines 51-52 of column 9; while claim recites television monitor, it is clear that a monitor functions the same as a television monitor, also Kumada also discloses similar device can be used, see lines 62 of column 9). It would have been obvious to one of ordinary skill in the art to utilize the teaching of Kumada to provide the user an

easier way to select an optimum color printer and simulate the output results when a plurality of color printers are available. Also, both Naoi and Kumada are directed to utilizing different color profiles to produce testing image to provide the best output.

The combination of Naoi and Kumada does not disclose a medical equipment interface. Marks discloses a method of generating graphic interface utilize the device (lines 60-61 of column 8 and Fig. 11). It would have been obvious to one of ordinary skill in the art to utilize the teaching of Marks to provide the advantage of allowing user to easily manipulate output image by selecting input parameters. Also, Naoi, Kumada and Marks are directed to a method of allowing user to review the output images to obtain the best result.

23. Claim 17-18, 26-27 and 34-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Naoi (US 6,351,263) and Kumada (US 6,549,654) as applied to claim 1 above and further in view of Stiegler (US 5,774,121).

24. Regarding claim 17, the combination of Naoi and Kumada does not disclose classes include: completely normal, reasonably normal, undecided, somewhat abnormal, and extremely abnormal. Stiegler discloses a user interface method for graphical decision making utilizing the method (lines 11-34 of column 4 and lines 38-58 of column 23 and Fig. 3; it is noted that while Stiegler discloses excellent, good, fair, poor and fail to classify the rating instead of completely normal, reasonably normal, undecided, somewhat abnormal, and extremely abnormal as recited by claim, it would have obvious matter of design choice to modify the Stiegler by having the classes completely normal, reasonably normal, undecided, somewhat abnormal, and extremely abnormal, since applicant has not disclosed that having the classes at specific terms solves any stated problem and it appears that the classes would perform equally well with the terms used by

Stiegler. It would have been obvious to one of ordinary skill in the art to substitute the rating method of Stiegler for the rating method of Naoi because Stiegler teaches that by utilizing the rating method will provide a more powerful analytical tool supporting a more natural visual evaluations to human (lines 28-36 of column 3).

25. Regarding claim 18, the combination of Naoi and Kumada does not disclose means for altering a user of the system if none of said rating images are assigned to the classes of completely normal or reasonably normal (Fig. 3; while claim recites alerting a user, by displaying the rating summary to the user such as in Fig. 3 will visually alert the user if none of the rating is completely normal (excellent) or reasonably normal (good)).

26. Regarding claims 26-27 and 34-35, statements presented above, with respect to claims 17-18 are incorporated herein.

Response to Arguments

27. Applicant's arguments filed December 03, 2003 have been fully considered but they are not persuasive.

The Applicant argues the reference Naoi does not teach or suggest entire color scale. However, the claim only recites color scale, and the term is broad enough to include input color range available according to the density specified (lines 6-19 of column 3, Naoi). The Applicant further argues that no adjustment and no complex equipment are necessary in the Applicant's system. However, the claim does not recite the limitation.

The Applicant argues that claim 3 is not obvious by the combination of Naoi, Kumada and Dermer. However, regarding claim 3, Naoi discloses an image processor designates processing parameters for data comprising: Evaluate the colors scales as determined by a

perceptual ordering of the test pattern by the user where the respective color scale is used to render the test pattern to the user (lines 5-29 of column 8). The combination of Naoi and Kumada does not disclose a rating process. Dermer discloses a method for determining color boundaries utilize the method (lines 57-68 of column 23 and lines 1-46 of column 24). It would have been obvious to one of ordinary skill in the art to substitute the method of defining the appropriate colors for image processing of Dermer for the method of defining the appropriate colors for image processing of Naoi because Dermer teaches that by utilize the teaching of selecting appropriate colors for image processing will provide the advantage of reducing the processing time of obtaining colors which minimize the visual effect (lines lines 36-38 of column 4).

Conclusion

28. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Sandow (US 5,909,220);

Rogowitz et al. (US 5,874,955).

29. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Po-Wei (Dennis) Chen whose telephone number is (703) 305-8365. The examiner can normally be reached on Monday-Thursday from 8:30 AM to 7:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew C Bella can be reached on (703) 308-6829. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Po-Wei (Dennis) Chen
Examiner
Art Unit 2676

Po-Wei (Dennis) Chen
February 23, 2004

Matthew C. Bella

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